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ABSTRACT

This paper presents a rationale for educating limited English proficiency (LEP) students and considers implications of that rationale for the education of LEP pupils requiring special education. Research in areas of bilingualism, bilingual education, and second language acquisition has provided a basis for an educational framework. A model of language proficiency that identifies two major dimensions of language proficiency (communicative language skills and academic language skills) is described, and a key implication for LEP students (that basic communicative skills in a language do not predict academic skills) is noted. Implications of the viewpoint stressing a common underlying proficiency (that academic language proficiency will be enhanced through using the language of greatest facility) are considered. The area of second language acquisition is examined, and the importance of exposure to comprehensible English in a positive affective environment is stressed. Application of these findings to LEP special education students suggests that screening should be performed in English and the students' home language; screening results should be analyzed to determine the presence of a learning disability or the negative effects of subtractive bilingualism; bilingual rather than English only instruction will be most helpful to many LEP special education students; and second language teaching approaches should stress acquisition rather than learning. (CL)

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A THEORETICAL FRAMEWORK FOR BILINGUAL INSTRUCTION:
HOW DOES IT APPLY TO STUDENTS IN SPECIAL EDUCATION

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In 1982, one of every ten students enrolled in the California public schools was of limited English proficiency (LEP). As with any large sub-population, a portion of these LEP students has been identified as needing special education services. This paper has two purposes: First, to describe briefly an empirically supported theoretical rationale for the education of limited English proficient students and second, to examine some tentative implications of that theoretical viewpoint for the education of LEP pupils who require special education services.

A Theoretical Framework

Educational programs designed for language minority students have traditionally been based on a combination of legislative mandates and educators' best guesses as to effective treatments. Theoretical rationales for bilingual programs and other approaches, when they have been put forth at all, have been offered either to justify stereotypic misconceptions of language minority students or to clothe conventional wisdom in the cloak of scientific respectability.

Fortunately, the situation is changing. A growing body of empirical research in the area of bilingualism, bilingual education, and second language acquisition has provided the raw material by which educational theory, that both explains existing evidence and predicts future outcomes, can now be

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on the efforts of many researchers and educators. Principal credit must be given to the insightful work of the contributors to Schooling and Language Minority Students: A Theoretical Framework, developed by the Office of Bilingual Bicultural Education of the California State Department of Education (1981). Readers interested in a more in-depth discussion of the ideas presented in this paper are directed to that volume.

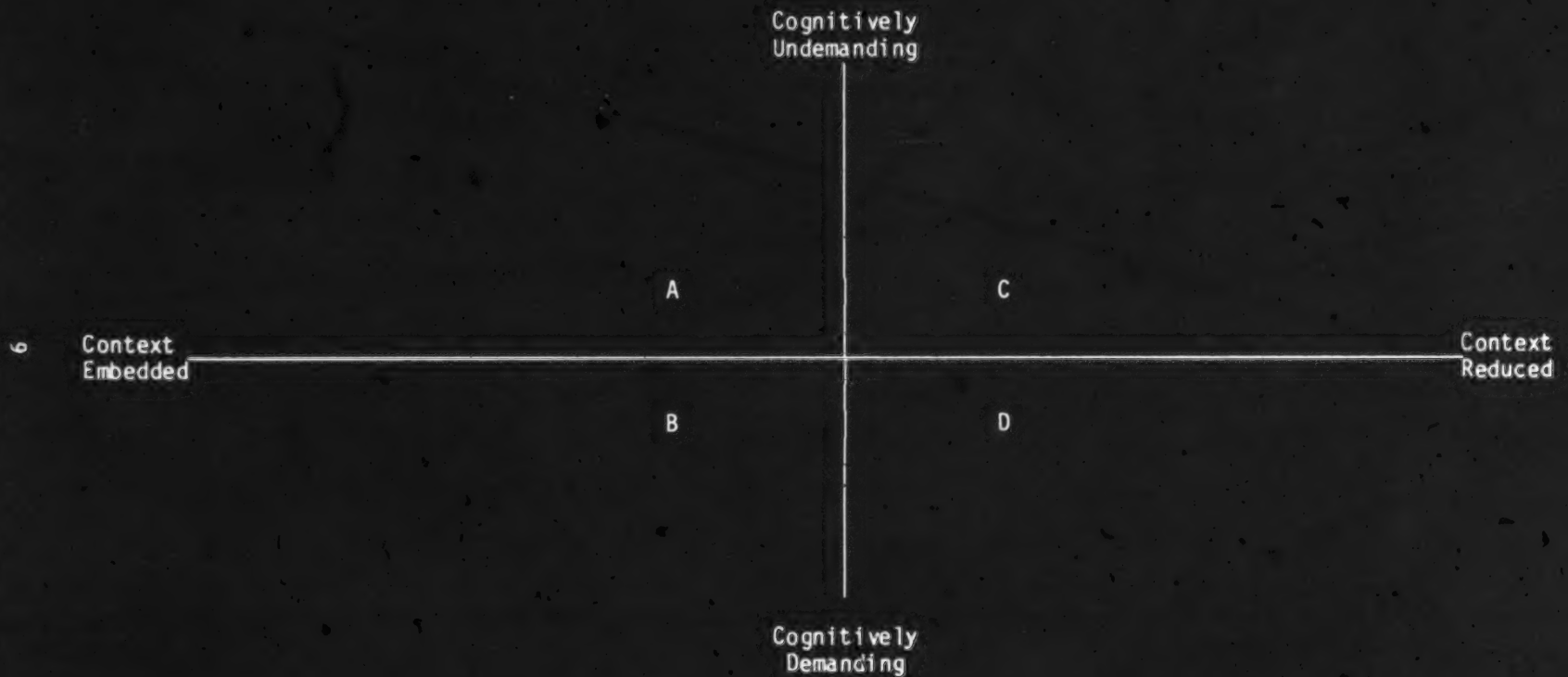
A Model of Language Proficiency

One logically might assume that because a group of students has been described as being of limited English proficiency, educators have a common understanding of what it means to be proficient in English. Unfortunately, that is not the case. Educators differ widely in their opinions as to when LEP students have the English language skills necessary to compete in English-only classrooms.

A model of language proficiency that explains the available evidence is put forth by Cummins (1981), who identifies at least two major dimensions of language proficiency: communicative language skills and academic language skills. In Cummins' view, all tasks requiring language skills may be placed on a grid formed by the intersection of two continua (Figure 1). The horizontal continuum in Figure 1, describes the amount of contextual support present in a task. At the context-embedded extreme of the continuum, meaning is actively negotiated between speaker and listener and the communication is supported by a wide range of contextual clues. An example of a context-embedded communication task would be determining whose turn is next during a game at recess time. At the other extreme of the continuum, context is reduced and few, if any, nonlinguistic or paralinguistic clues as to meaning are provided. An example of context-reduced communication might be the reading of a chapter in a history text.

FIGURE 1

Range of Contextual Support and Degree of Cognitive Involvement
in Communicative Activities



From Cummins, 1981.

The vertical continuum in Figure 1 on the previous page, relates to the cognitive demands of the communication task. An example of a cognitively undemanding task might be the experienced driver's reading of common traffic safety signs, an activity that has become so habitual as to be almost subconscious. At the other extreme, listening to a lecture in an unfamiliar field is very cognitively demanding.

Two important observations can be drawn from Cummins' model of language proficiency. First, almost all human beings develop the language proficiency, in at least one language, necessary to complete context-embedded, cognitively undemanding tasks (quadrant A). This type of language proficiency, which might best be described as basic communicative skills, is used to communicate messages, often in face to face situations, where the speakers share a common reality or understanding of the topic. Second, the ability to complete cognitively demanding tasks in context-reduced situations (quadrant D) varies greatly among the general population and seems based on one's inherent ability and access to educational experiences both in and out of school. Because tasks confronting students in school are more frequently found in quadrant D than in quadrant A, this type of language proficiency is best termed academic language proficiency.

Research supports an important conclusion that can be drawn from Cummins' work: Basic communicative skills in a language do not predict academic skills. An understanding of this finding is particularly crucial for the education of LEP pupils. As will be discussed shortly, LEP students will acquire basic communicative skills in English if they are motivated to do so and if they are exposed to sufficient and appropriate English input. However, being able to use English for basic communicative purposes does not predict the LEP pupil's success in an English-only classroom.

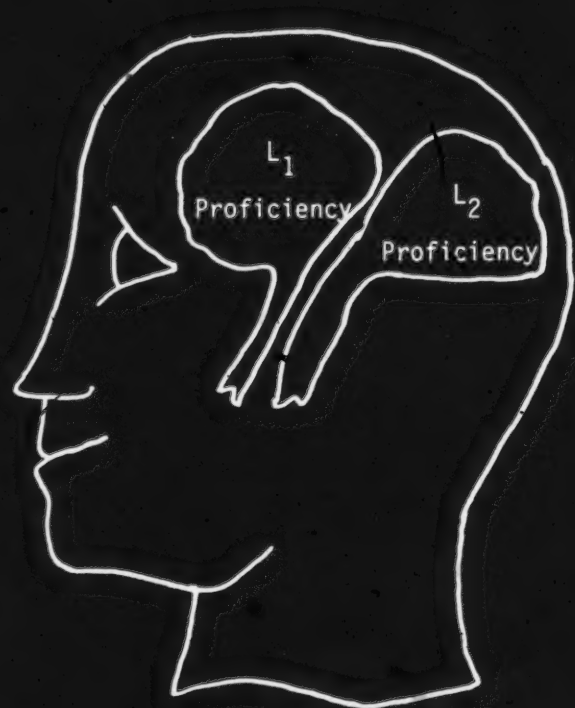
The Common Underlying Proficiency

What does predict the LEP student's attainment of age appropriate academic language skills? The degree to which a student develops academic language proficiency seems a function of inherent ability and exposure to educational experiences. Many educators argue that since academic language skills must eventually be expressed in English, LEP students should be instructed through English. Equally vocal are educators who believe the LEP pupils should be instructed in their primary or home language until they are clearly able to perform in English.

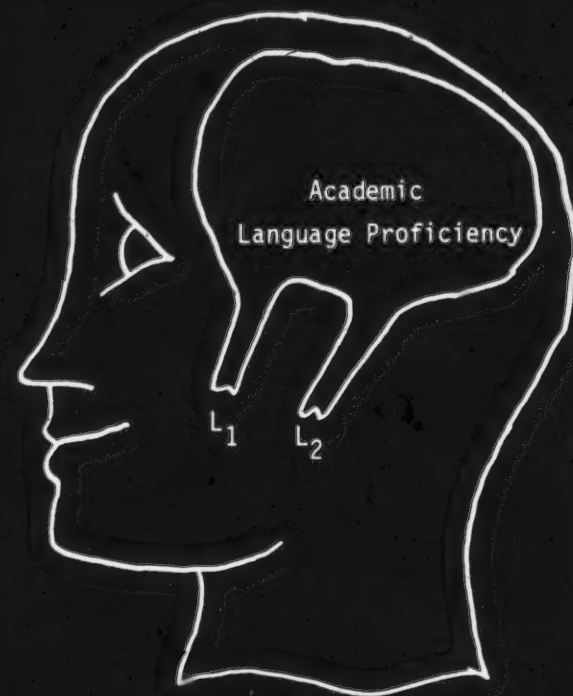
These contrasting positions are related to two prevalent views of how bilinguals process and store language. These are illustrated in Figure 2 on the following page. One view holds that a bilingual's proficiencies in each language are developed independently and stored separately in the brain. Termed the Separate Underlying Proficiency Model, this position is illustrated in Figure 2 by a head with two balloons, each balloon representing a separate, language-specific proficiency. Instruction in one language will blow up the balloon of language proficiency for that language, but will have no effect on the other balloon, other than to reduce the space available to fill it. The practical implications of this model seem obvious: efforts devoted to developing proficiency in one language have no effect on proficiency in the other language and, indeed, may have negative effects by competing for a limited brain capacity. If there is a limited amount of time and mental capacity available, then efforts should be directed at developing proficiency in the more educationally, socially, and economically useful of the two languages (e.g., English in the United States).

There is, however, a second view of bilingual proficiency illustrated in Figure 2. In this view, the bilingual's academic language proficiency is

FIGURE 2
Two Views of Bilingualism



Separate Underlying Proficiency



Common Underlying Proficiency

From Cummins, 1981

seen as interdependent across languages, not separate and totally specific to a given language. Development of this Common Underlying Proficiency through activities in one language is tantamount to developing the same proficiency in the other language. In other words, developing the ability to master cognitively demanding tasks in context-reduced environments in one language will provide the same ability in the other language.

Which view is correct? Despite its intuitive appeal, there is no evidence supporting the Separate Underlying Proficiency view of bilingual language proficiency. There is, on the other hand, ample evidence supporting the Common Underlying Proficiency Model. For example, evaluation studies comparing the achievement in English of LEP students in bilingual programs with similar students in English-only programs, have favored the students in the bilingual programs, despite the fact that bilingual program students received considerably less instruction in English than the comparison students (Rosier and Holm, 1980; Evaluation Associates, 1975; Egan and Goldsmith, 1981).

In addition, studies examining the relationship between age and rate of second language acquisition almost invariably show that older learners go faster than younger learners in handling academic language tasks (reading, vocabulary acquisition, exposition writing) in the second language (see Izzo, 1981, for a review). This finding is not surprising when one considers that older learners, through experiences in and out of school, have a more completely developed Common Underlying Proficiency than younger learners. Furthermore, studies which have investigated directly the relationship between academic language proficiency, as expressed in a first and second language, have typically found correlations in the .60 to .80 range (Cummins, 1979; Lapkin and Swain, 1979; Development Associates, 1980). For example, in a

given group of bilinguals, those who read best in language X will probably be the best readers in language Y. Conversely, those who are among the poorer readers in X will usually be among the poorer readers in Y. If there were little or no relationship between academic language proficiency in a first and second language, as the Separate Underlying Proficiency Model proposes, then the reported correlations would cluster around .00.

The implications of the Common Underlying Proficiency view of bilingual language proficiency for LEP students seem clear: Academic language proficiency will be enhanced through using the language of greatest facility. For most LEP students, this language is the home language.

Second Language Acquisition

Of course, to be able to express this Common Underlying Proficiency in English, LEP students need to acquire communicative language proficiency in English. The literature in second language development identifies two processes by which an individual might develop communicative proficiency in a second language: learning and acquisition (Krashen, 1981b; Stevick, 1980). When "learning" a language, students consciously attempt to know the language, to describe the rules governing the use of that language, to commit those rules to memory, and to apply them in order to generate grammatically correct utterances. Second language "acquisition," on the other hand, is a more subconscious process, similar to the natural process of acquiring one's first language. People who have acquired a second language often report that they "picked up" the language while living in another country or by exposure in the home. Although they are quite fluent in the language, they are often unable to describe the rules that govern the use of the language.

In planning an educational program for language minority students, one

is faced with a dilemma. Which approach is better: An approach that emphasizes "learning," an approach that depends on "acquisition," or some combination of the two? Current research suggests that, for the development of basic communicative skills, an approach based on contemporary theory in second language acquisition will be the most efficient and effective.

"Acquiring" a second language is dependent upon input, or the raw data, that the brain will process in order to generate utterances. As with a child acquiring a first language, second language acquirers need sufficient understandable linguistic input so that they can begin to make sense of the language. Krashen (1981b) uses the term "comprehensible input" to describe the type of linguistic data required for second language "acquisition."

In order for input to be comprehensible to the second language acquirer, it must have several characteristics. First, it must contain language (structures and lexical items) already known to the student, plus some language that has not yet been acquired. This "new language" can be understood through context (e.g., situation, concrete referents), paralinguistic clues (e.g., intonation, repetition, paraphrasing, syntactic and lexical simplification, clear articulation, reduction in rate of speech), and use of student's knowledge of the topic.

The student's ability to comprehend the new input will be enhanced by a second characteristic of comprehensible input, meaningful content. It is not sufficient that input focus on messages rather than form. To ensure maximum comprehensibility of the input, the messages must be intrinsically interesting to the students so that they are encouraged to persist in "negotiating meaning" (see Cummins, 1981).

A third characteristic of comprehensible input is that it need not be grammatically sequenced. Although we know that students tend to acquire the

structures of English in a predictable order (Bailey, Madden, and Krashen, 1974; Dulay and Burt, 1974; Krashen 1981b), it is not necessary to organize instruction according to that sequence. The focus on meaningful messages communicated in an understandable manner, will ensure that the appropriate grammatical structures are included in the comprehensible input.

Providing students comprehensible second language input, however, is not sufficient for language acquisition to take place. In order for optimum acquisition to occur, the raw material of language, comprehensible input, must be reached and be processed in the brain's language acquisition device. A number of affective factors, termed the "affective filter" (Dulay and Burt, 1977), may limit the amount of comprehensible input available for processing and either impede or facilitate the student's production of language. Such affective factors as low anxiety (Stevick, 1976), positive motivation (Gardner and Lambert, 1972), and self-confidence (Krashen, 1981b; Wong-Fillmore, 1979) have been shown to be positively associated with second language acquisition. Conversely, where students are anxious in the second language classroom, where they are not motivated to speak the new language, and where they lack self-confidence and self-esteem, acquisition will be impaired.

Summary

In summary, and at the risk of over-simplification, the theoretical framework outlined is based on three principles:

1. There are at least two dimensions of language proficiency: communicative language proficiency and academic language proficiency. The fact that a LEP student has acquired communicative proficiency in English tells us little about the student's ability to complete tasks requiring academic language proficiency in English.
2. Among bilinguals, the development of academic language proficiency is generally not language specific, but is best described as a common underlying proficiency which can be developed and expressed through either language. The choice of which language to use to develop this Common Underlying

Proficiency should, in most cases, be the language with which the LEP student has greatest facility.

3. LEP students will acquire communicative language proficiency if they are exposed to sufficient amounts of comprehensible English input in a positive affective environment.

Implications for Special Education Students

Although research on the LEP special education student has been sparse, the theoretical framework I have briefly described, along with some supporting research, does suggest some tentative answers to questions frequently raised in three areas: identification, language choice, and English instruction.

Identification

One clear implication that can be drawn from the theoretical framework affects the screening of LEP pupils for special education services: LEP pupils being screened for special education should be assessed in both English and their primary language. The necessity of screening in both languages is particularly crucial in assessing academic language proficiency (e.g., reading, writing, vocabulary acquisition). Although research findings indicate that LEP students usually acquire communicative language proficiency in English in two years, it takes these students from five to seven years to approach age-level norms in academic language proficiency (Cummins, 1981). Concern should be expressed, however, when language minority students lag significantly behind age-level norms in both languages.

Unfortunately, simply assessing language minority students in two languages is not enough. The interpretation of the result of the assessments must be done with an awareness of the relationship between being bilingual on the one hand, and academic achievement and cognitive development on the other. Studies of the relationship between bilingualism and academic achievement and cognitive development conducted in the first half of the century

almost invariably showed a negative relationship between bilingualism and intelligence and academic success (see Darcy, 1953, for a review). More recent studies, however, have often shown cognitive and academic benefits associated with bilingualism (Duncan and DeAvila, 1979; Kessler and Quinn, 1980; Development Associates, 1980; Bain and Yu, 1980; Swain and Lapkin, 1981). Although there has been a tendency to resolve this contradiction by citing the obvious methodological weaknesses of many of the earlier studies, a number of studies showing deficits associated with bilingualism meet most methodological challenges.

There is, in fact, a more reasonable resolution of the apparent contradiction. When one examines the relative language proficiencies of the subjects in the various studies, it can be seen that negative consequences are associated with what might be called "limited bilingualism" or less than native-like skills in either language. Finnish researcher Skutnabb-Kangas (1979) states that limited bilingualism is "produced in a situation where many different factors coincide: minority children from working class homes are forced to accept instruction in the foreign, majority, middle class language, and their own language has low prestige, both in the society and in the school" (pp. 17-18). Even though Skutnabb-Kangas was writing about Finnish immigrant children in Sweden, one can easily see that limited bilingualism is a common occurrence in the United States as well.

"Subtractive bilingualism" is the term used to describe the process by which an individual becomes a limited bilingual. In the subtractive process, little effort is made by the individual, or institutions such as the school, to maintain and develop the primary language while the second language is being acquired. For school age children, a lucky few manage to "catch up"

linguistically to the native speakers of the second language. Many do not and pay the price of limited bilingualism.

The problem for special educators is that language minority students, who have undergone a process of subtractive bilingualism and have become limited bilinguals, appear to have language disorders or are academically handicapped. In fact, their language and academic skills only reflect an inappropriate education in a sociolinguistic environment that does not support development of their home language.

Language Choice

If an LEP pupil has been appropriately identified as requiring special education services, educators must then decide which language, English or the home language, to use for instruction. Many educators believe that some form of bilingual instruction would be of greatest benefit to such students, while others contend that instruction in two languages will only exacerbate the student's learning problems. This latter group holds that LEP special education students should be schooled exclusively in the language most used in this country: English.

Although not enough research has been done on this issue, the studies that have been done suggest that instruction in two languages is not detrimental to students of low intelligence or learning disabilities. Genesee (1976) compared the English language achievement scores of below average IQ, English speaking students in French-English bilingual programs and in English-only programs. He found no significant difference in the achievement scores of the two groups. In other words, instruction in two languages did no harm to these lower-than-average IQ students.

Research findings about the effects of bilingual instruction on students

with language learning disabilities is consistent with the findings reported for students of below average intelligence. Bruck (1978) found, in a longitudinal study, that students with language learning disabilities who were taught bilingually, acquired their basic skills at the same rate as similar students receiving monolingual instruction.

English Instruction

Few educators or parents deny the importance of English language proficiency for LEP children requiring special education services. How to best assist these students to develop communicative language proficiency in English should be an issue of concern to educators.

Research has shown that several factors influence the level and rate of second language development. Included among these are age, instructional method, attitudes, and aptitude. The question of the role of second language aptitude, which is strongly related to general intelligence and academic achievement, seems especially relevant in deciding upon instructional approaches for LEP special education students. Krashen (1981a) has hypothesized that "the aptitude factor will show a strong relationship to second language proficiency in 'monitored' test situations and when conscious learning has been stressed in the classroom" (p. 161, emphasis added). It would seem reasonable that for students of below average intelligence or for those who suffer learning disabilities, approaches which stress acquisition rather than learning might be appropriate. This notion is supported by Genesee (1976) who reported on the acquisition of communicative language proficiency in French, of English speaking students of below, average, and above average IQ in French-English bilingual programs where much of the instruction was done in French using an acquisition approach. Genesee

found that, although the development of academic language proficiency was strongly related to IQ, all groups tended to acquire similar levels of communicative language proficiency. He concluded that, "in second language programs where the goals pertain to proficiency in nonacademic language skills, then a nonacademic approach to second language teaching may be more effective with students possessing a broad range of intellectual and scholastic abilities than programs which take an academic approach" (p. 500).

Summary

Application of the theoretical framework for the education of language minority students to LEP special education pupils suggests that:

1. LEP special education candidates should, to the extent instruments are available, be screened in both English and their home language.
2. The results of such screening assessments should be carefully examined to determine if the child, in fact, has a learning disability or is suffering the negative effects of subtractive bilingualism.
3. For many LEP special education students, bilingual rather than English-only instruction will be of greatest benefit to the student.
4. For many LEP special education students, second language teaching approaches that stress acquisition rather than learning are most appropriate.

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